

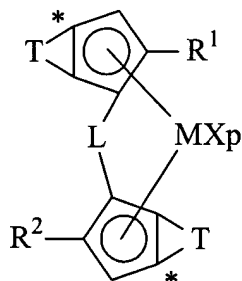
ATTACHMENT A

Claims 1 - 22: (Cancelled)

23. (New) A multistage process comprising the following steps:

- polymerizing a propylene resin optionally comprising one or more monomers selected from ethylene and alpha olefins of formula  $\text{CH}_2=\text{CHT}^1$ , wherein  $\text{T}^1$  is a  $\text{C}_2\text{-C}_{20}$  alkyl radical in presence of a catalyst system, the catalyst system supported on an inert carrier comprising:

i) at least one metallocene compound of formula (I):



(I)

wherein:

M is a transition metal selected from those belonging to group 3, 4, 5, 6 or to a lanthanide or actinide group in the Periodic Table of the Elements;

p is an integer from 0 to 3, wherein p is equal to a formal oxidation state of M minus 2;

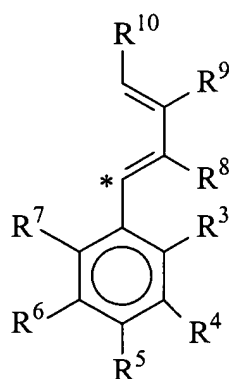
X, same or different, is hydrogen, a halogen, or R, OR,  $\text{OSO}_2\text{CF}_3$ , OCOR, SR,  $\text{NR}_2$  or  $\text{PR}_2$ , wherein R is a linear or branched, saturated or unsaturated  $\text{C}_1\text{-C}_{20}$  alkyl,  $\text{C}_3\text{-C}_{20}$  cycloalkyl,  $\text{C}_6\text{-C}_{20}$  aryl,  $\text{C}_7\text{-C}_{20}$  alkylaryl or  $\text{C}_7\text{-C}_{20}$  arylalkyl radical, optionally

containing heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements; or two X can optionally form a substituted or unsubstituted butadienyl radical or OR'O wherein R' is a divalent radical selected from C<sub>1</sub>-C<sub>20</sub> alkylidene, C<sub>6</sub>-C<sub>40</sub> arylidene, C<sub>7</sub>-C<sub>40</sub> alkylarylidene and C<sub>7</sub>-C<sub>40</sub> arylalkylidene radicals;

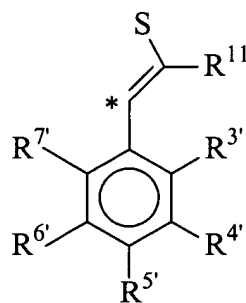
L is a divalent bridging group selected from C<sub>1</sub>-C<sub>20</sub> alkylidene, C<sub>3</sub>-C<sub>20</sub> cycloalkylidene, C<sub>6</sub>-C<sub>20</sub> arylidene, C<sub>7</sub>-C<sub>20</sub> alkylarylidene, or C<sub>7</sub>-C<sub>20</sub> arylalkylidene radicals optionally containing heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements, and silylidene radical containing up to 5 silicon atoms;

R<sup>1</sup> and R<sup>2</sup>, equal to or different from each other, are linear or branched, saturated or unsaturated C<sub>1</sub>-C<sub>20</sub>-alkyl radicals, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements;

T, equal to or different from each other, is a moiety of formula (IIa) or (IIb):



(IIa)



(IIb)

wherein the atom marked with symbol \* bonds the atom marked with the same symbol in the metallocene compound of formula (I);

$R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$ , equal to or different from each other, are hydrogen or linear or branched, saturated or unsaturated  $C_1$ - $C_{40}$ -alkyl,  $C_3$ - $C_{40}$ -cycloalkyl,  $C_6$ - $C_{40}$ -aryl,  $C_7$ - $C_{40}$ -alkylaryl, or  $C_7$ - $C_{40}$ -arylalkyl radicals, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements; or two or more  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  can join to form a 4-7 membered saturated or unsaturated ring, said ring can bear at least one  $C_1$ - $C_{20}$  alkyl substituent; with the proviso that at least one substituent selected from the group consisting of  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$  and  $R^7$  is a linear or branched, saturated or unsaturated  $C_1$ - $C_{40}$ -alkyl,  $C_3$ - $C_{40}$ -cycloalkyl,  $C_6$ - $C_{40}$ -aryl,  $C_7$ - $C_{40}$ -alkylaryl, or  $C_7$ - $C_{40}$ -arylalkyl radical optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements;

$R^8$ ,  $R^9$  and  $R^{10}$ , equal to or different from each other, are hydrogen or linear or branched, saturated or unsaturated  $C_1$ - $C_{20}$ -alkyl,  $C_3$ - $C_{20}$ -cycloalkyl,  $C_6$ - $C_{20}$ -aryl,  $C_7$ - $C_{20}$ -alkylaryl, or  $C_7$ - $C_{20}$ -arylalkyl radicals, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements; or two or more  $R^8$ ,  $R^9$  and  $R^{10}$  can join to form a 4-7 membered saturated or unsaturated ring, said ring can bear at least one  $C_1$ - $C_{10}$  alkyl substituent;

R<sup>11</sup> is hydrogen or a linear or branched, saturated or unsaturated C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>3</sub>-C<sub>20</sub>-cycloalkyl, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>7</sub>-C<sub>20</sub>-alkylaryl, or C<sub>7</sub>-C<sub>20</sub>-arylalkyl radicals, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements;

R<sup>3'</sup>, R<sup>4'</sup>, R<sup>5'</sup>, R<sup>6'</sup> and R<sup>7'</sup> equal to or different from each other, are hydrogen or linear or branched, saturated or unsaturated C<sub>1</sub>-C<sub>40</sub>-alkyl, C<sub>3</sub>-C<sub>40</sub>-cycloalkyl, C<sub>6</sub>-C<sub>40</sub>-aryl, C<sub>7</sub>-C<sub>40</sub>-alkylaryl, or C<sub>7</sub>-C<sub>40</sub>-arylalkyl radicals, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements; or two or more R<sup>3'</sup> R<sup>4'</sup> R<sup>5'</sup> R<sup>6'</sup> and R<sup>7'</sup> can join to form a 4-7 membered saturated or unsaturated ring, said ring can bear at least one C<sub>1</sub>-C<sub>10</sub> alkyl substituent;

ii) an alumoxane or a compound capable of forming an alkyl metallocene cation;

- contacting under polymerization conditions in a gas phase, ethylene with one or more alpha olefins of formula CH<sub>2</sub>=CHT<sup>1</sup>, wherein T<sup>1</sup> is a C<sub>2</sub>-C<sub>20</sub> alkyl radical, and optionally with a non-conjugated diene to produce an ethylene resin, the ethylene resin is produced in presence of the propylene resin, wherein the amount of the propylene resin is higher than 4% and lower than 20% by weight, and the amount of the ethylene resin is higher than 80% by weight and lower than 96% by weight.

24. (New) The process according to claim 23, wherein the catalyst system further comprises iii) an organo aluminum compound.

25. (New) The process according to claim 24, wherein the process of polymerizing a propylene resin is carried out in presence of an additional organo aluminum compound.

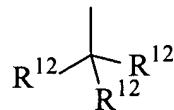
26. (New) The process according to claim 23, wherein M is titanium, zirconium or hafnium; p is 2; X is hydrogen, a halogen, or R, wherein R is defined as in claim 23; L is selected from the group consisting of  $\text{Si}(\text{CH}_3)_2$ ,  $\text{SiPh}_2$ ,  $\text{SiPhMe}$ ,  $\text{SiMe}(\text{SiMe}_3)$ ,  $\text{CH}_2$ ,  $(\text{CH}_2)_2$ ,  $(\text{CH}_2)_3$  and  $\text{C}(\text{CH}_3)_2$ ; and  $\text{R}^1$  and  $\text{R}^2$  are methyl or ethyl radicals.

27. (New) The process according to claim 23, wherein at least one substituent selected from the group consisting of  $\text{R}^{3'}$ ,  $\text{R}^{4'}$ ,  $\text{R}^{5'}$ ,  $\text{R}^{6'}$  and  $\text{R}^{7'}$  is a linear or branched, saturated or unsaturated  $\text{C}_1$ - $\text{C}_{40}$ -alkyl,  $\text{C}_3$ - $\text{C}_{40}$ -cycloalkyl,  $\text{C}_6$ - $\text{C}_{40}$ -aryl,  $\text{C}_7$ - $\text{C}_{40}$ -alkylaryl, or  $\text{C}_7$ - $\text{C}_{40}$ -arylalkyl radical, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements.

28. (New) The process according to claim 23, wherein  $\text{R}^5$  and  $\text{R}^{5'}$ , equal to or different from each other, are linear or branched, saturated or unsaturated  $\text{C}_1$ - $\text{C}_{40}$ -alkyl,  $\text{C}_3$ - $\text{C}_{40}$ -cycloalkyl,  $\text{C}_6$ - $\text{C}_{40}$ -aryl,  $\text{C}_7$ - $\text{C}_{40}$ -alkylaryl, or  $\text{C}_7$ - $\text{C}_{40}$ -arylalkyl radicals, optionally containing one or more heteroatoms belonging to groups 13-17 of the Periodic Table of the Elements.

29. (New) The process according to claim 28, wherein  $\text{R}^5$  and  $\text{R}^{5'}$ , equal to or different from each other, are branched  $\text{C}_1$ - $\text{C}_{40}$ -alkyl radicals.

30. (New) The process according to claim 29, wherein R<sup>5</sup> and R<sup>5'</sup> have formula (III):



(III)

wherein R<sup>12</sup>, equal to or different from each other, is a C<sub>1</sub>-C<sub>10</sub> alkyl radical.

31. (New) The process according to claim 23, wherein R<sup>3</sup>, R<sup>4</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>3'</sup>, R<sup>4'</sup>, R<sup>6'</sup> and R<sup>7'</sup> are hydrogen, and R<sup>11</sup> is a linear or branched, saturated C<sub>1</sub>-C<sub>20</sub>-alkyl.

32. (New) The process according to claim 23, wherein T have formula (IIa) and R<sup>9</sup> is a C<sub>1</sub>-C<sub>20</sub> alkyl radical.

33. (New) The process according to claim 23, wherein T have formula (IIb).

34. (New) The process according to claim 23, wherein T have formula (IIa) and R<sup>9</sup> is hydrogen.

35. (New) The process according to claim 23, wherein T are different and have formulas (IIb) and (IIa).

36. (New) The process according to claim 23, wherein T have formula (IIb) and R<sup>11</sup> is a linear or branched, saturated C<sub>1</sub>-C<sub>20</sub>-alkyl radical.

37. (New) The process according to claim 23, wherein the inert carrier is a porous organic polymer.

38. (New) The process according to claim 23, wherein the process of polymerizing a propylene resin further comprises a prepolymerization step.

39. (New) The process according to claim 38, wherein the catalyst system is prepolymerized.

40. (New) The process according to claim 23, wherein the process is carried out in presence of hydrogen.

41. (New) The process according to claim 23, wherein the propylene resin produced comprises from 10% to 18% by weight of a propylene homopolymer or propylene copolymer containing up to 20% by mol of ethylene or one or more alpha olefins of formula  $\text{CH}_2=\text{CHT}^1$ .

42. (New) The process according to claim 23, wherein the ethylene resin produced comprises from 82% to 90% by weight of an ethylene copolymer having from 3% by mol to 60% by mol of derived units of comonomers of formula  $\text{CH}_2=\text{CHT}^1$  and optionally up to 20% by mol of a non conjugated diene.

43. (New) The process according to claim 23, wherein the propylene resin is a propylene homopolymer.

44. (New) The process according to claim 23, wherein the ethylene resin is an ethylene 1-butene copolymer having a 1-butene content ranging from 5% to 45% by mol.